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MONTANA STANDARDIZED 2002-03 TEST SCORES: The Results and How to Interpret Them

The Board of Public Education requires all accredited Montana schools to report student achievement scores for grades 4, 8, and 11 in reading, mathematics, science, language arts and social studies to the Office of Public Instruction. In the spring of 2003, all Montana 4th and 8th grades took the Iowa Tests of Basic Skills (ITBS) and 11th grade students took the Iowa Tests of Educational Development (ITED). This was the third year all Montana students participated in the same tests and should provide more useful information.

A complete reporting of the test scores for each Montana school district and the schools within that District can be found on the Office of Public Instruction web page at www.opi.state.mt.us/Assessment/index.html

The Montana Board of Public Education requires all students, including those with disabilities, to participate in the statewide assessments. A total of 33,852 Montana students took the tests in 2003.

Student Privacy Rights

Federal and state statutes protect the privacy of certain student records, including test results. The Federal Family Rights and Privacy Act (FERPA) and the Montana privacy statutes require certain student information be protected and used only by those persons who have a direct educational responsibility for that student's instruction. OPI policy limits release of protected student information in instances where release of that information would identify a particular student.

Consequently, the release of test scores for any individual school with five or fewer students in a grade has been aggregated into "category-size totals." This involves more than 120 of Montana's smallest schools. Districts receiving requests for information must always consider whether the information released can be identified with an individual student. If a school district determines an individual student could be identified from the release of test scores, the district should not release the scores. The very small school totals have been combined to provide information on how students those schools performed.

How the Information is Organized

The state report will include information on how students in the 4th, 8th, and 11th grades performed in reading, mathematics, science, language arts, and social studies. The reports will organize the information at three levels. The information will be aggregated by state totals, totals for different school size categories, and by individual schools within each district and county. The information can also be obtained for different

demographic groups of students including gender, race, students participating in free and reduced lunch programs, and students with disabilities.

Each school report lists:

- the grade level taking the test
- the number of students taking each test
- the number of students enrolled
- the National Percentile Rank (NPR)
- the Normal Curve Equivalent (NCE)
- the percentage of students at each National Stanine (NS) proficiency level within each subject area

National Percentile Rank

The National Percentile Rank (NPR), on a scale from 1-99, indicates the percent of Montana students who scored at or above the national norm. This national norm group of all students is used as the basis of comparison for Montana students in each of the three categories below. The NPR is considered an achievement score and is most useful in comparison with the national norm group. Montana students in grades 4, 8, and 11 scored significantly higher than the national norm group in all subject areas.

The following table displays the National Percentile Ranks for Montana students in grades 4, 8, and 11 who took the Iowa Tests in 2001 through 2003 for each year, grade, and subject.

	NPR 2001 Grade 4	NPR 2002 Grade 4	NPR 2003 Grade 4	NPR 2001 Grade 8	NPR 2002 Grade 8	NPR 2003 Grade 8	NPR 2001 Grade 11	NPR 2002 Grade 11	NPR 2003 Grade 11
Reading	66%	66%	67%	60%	60%	59%	66%	67%	67%
Language Arts	68%	67%	67%	57%	57%	57%	62%	62%	61%
Math	62%	62%	64%	64%	58%	59%	61%	61%	62%
Social Studies	67%	68%	69%	62%	60%	59%	66%	67%	66%
Science	71%	69%	70%	64%	64%	64%	70%	71%	70%

National Curve Equivalent

The average Normal Curve Equivalent (NCE) for a school is the average score on a scale from 1 to 99 achieved by that group of students in a particular subject area. The average NCE is always at 50. NCE's may be averaged to describe group performance.

National Stanines

The National Stanines (NS) indicate proficiency levels on a scale from 1-9. Stanines are used to identify the distribution of students scoring at different levels of a standardized test. For purposes of reporting student proficiency levels, Montana has arranged the nine stanines into four broader performance categories of novice, nearing proficiency, proficient, and advanced.

Novice: students beginning to attain the prerequisite knowledge and skills fundamental for that subject matter. This includes the percentage of students performing at stanine 1-3 levels.

Nearing Proficiency: students with partial mastery of the prerequisite knowledge and skills fundamental for that subject matter. This includes the percentage of students performing at the stanine 4 level.

Proficient: students demonstrating competency over the subject matter including subject matter knowledge, application of such knowledge to real world situations, and the analytical skills appropriate to the subject matter. This includes the percentage of students performing at stanines 5-7 levels.

Advanced: students achieving a superior mastery of the subject matter. This includes the percentage of students performing at stanine 8-9 levels.

Montana Student Test Scores 2002-03: State Totals

		National Percentile Rank	Normal Curve Equivalent	Total % Proficient and Advanced	% Advanced	% Proficient	% Nearing Proficiency	% Novice
Grade								
4	Reading	67	59	79%	20%	59%	13%	10%
4	Lang Arts	67	60	76%	18%	58%	13%	11%
4	Math	64	57	74%	15%	59%	13%	13%
4	Soc St	69	61	79%	19%	60%	12%	10%
4	Science	70	61	81%	22%	59%	10%	9%
8	Reading	59	55	71%	15%	56%	15%	15%
8	Lang Arts	57	54	68%	12%	56%	18%	15%
8	Math	59	55	69%	14%	55%	14%	16%
8	Soc St	59	55	71%	16%	55%	16%	14%
8	Science	64	58	77%	17%	60%	12%	11%
11	Reading	67	59	78%	21%	57%	12%	9%
11	Lang Arts	61	56	76%	16%	60%	15%	9%
11	Math	62	57	78%	17%	61%	12%	11%
11	Soc St	66	59	79%	19%	60%	12%	9%
11	Science	70	61	82%	23%	59%	9%	9%

